

Volume 13 1995 Index

Table of Contents

January

- 7 Out with the Old, In with the New: Time for a New Drug Development Agency? (Editorial) Susan Hassler
- 9 Proof of Utility/A Stabilizing Influence (Correspondence)
- 10 Has Consolidation Finally Commenced? (News) Joseph Alper
- 12 The Biotech Sector's Clarion Call for Cash (News) Peter Drake, Gregory Brown
- 13 Good Science Doesn't Guarantee Good Drugs (News) Jacqueline Siegel
- 13 BST Off to a Fast Start, Despite Early Stumbles (News) Russ Hoyle
- 15 A Persistent Monsanto Tames Hybrid Wheat (News) George Kidd, James Dvorak
- 18 The Ethical Roar of Germ-Line Gene Therapy (News) Jeffery L. Fox
- 19 Republican Congress Could Unsettle U.S. Biotech (News) Jeffery L. Fox
- 20 Biotech Consumers Discriminate (News) Bernard Dixon
- 21 Europe's Unknown Patent Future (News) Mike Ward
- 22 Tobacco Biotechnology Is Turning Over a New Leaf (News) Harvey Bialy
- 23 Enzymatic 7-ADCA: I Said It Couldn't Be Done (News) Arnold Demain
- 25 Comprehensive Reform of the New Drug Regulatory Process (Article) Stanley T. Crooke
- 31 Industrial Ecology: Biotech's Role in Sustainable Development (Article) Stephen M. Edgington
- 35 Suicide Microbes on the Loose (Article) Juan L. Ramos, Poul Andersson, Lars B. Jensen, Cayo Ramos, M. Carmen Ronchel, Eduardo Diaz, Kenneth N. Timmis, Soren Molin
- 38 New Formulas for Carbohydrates (Article) John Hodgson
- 42 How to Avoid Patent Rejection (Biotoools) Jean B. Fordis, Lawrence M. Sung
- 44 Environmental Audit Reports: Proceed with Caution (Biotoools) Edward L. Quevedo
- 46 Solute Focusing Techniques for Bioseparations (Review) Lisa L. Evans, Mark A. Burns
- 53 Malarial Epitopes Expressed on the Surface of Recombinant Tobacco Mosaic Virus (Research) Thomas H. Turpen, Stephen J. Reini, Yupin Charoenvit, Stephen L. Hoffman, Victoria Fallame, Laurence K. Grill
- 58 Production of Cephalosporin Intermediates by Feeding Adipic Acid to Recombinant *Penicillium chrysogenum* Strains Expressing Ring Expansion Activity (Research) Lorilee Crawford, Anthony M. Stepan, Phyllis C. McAda, John A. Rambosch, Michael J. Conder, Victor A. Vinci, Christopher D. Reeves
- 63 A Thermostable Xylanase from *Clostridium thermocellum* Ex-

- pressed at High Levels in the Apoplast of Transgenic Tobacco Has No Detrimental Effects and Is Easily Purified (Research) K. Herbers, I. Wilke, U. Sonnewald
- 67 Overproduction of Encapsulated Insecticidal Crystal Proteins in a *Bacillus thuringiensis* *spo0A* Mutant (Research) Didier Lereclus, Hervé Agaisse, Myriam Gominet, Josette Chauvaux
- 72 Plant Seed Oil Bodies as Carriers for Foreign Proteins (Research) Gijis J.H. Van Rooijen, Maurice M. Moloney
- 96 Transgenic Crops: USDA Data on Small-Scale Tests Contribute Little to Commercial Risk Assessment (Editorial) Margaret Mellon, Jane Rissler

February

- 103 Green Fluorescent Protein: The Next Generation (Editorial) Susan Hassler
- 105 Environmental Biotechnology Phage Misplay (Correspondence)
- 106 Schering-Plough Launches Biotech Buying Spree (News) Joseph Alper
- 107 Ligand and Allergan Form \$100 Million Venture (News) Lesley Wright
- 109 Biostocks Near Four-Year Low (News) R.B. Fradd, C. Engelberg
- 110 Agbiotech Can Learn From the Derivatives Scandal (News) George Kidd, James Dvorak
- 112 Gingrich Spearheads a Call for Deregulation (News) Russ Hoyle
- 114 USDA's Food-Safety Push Boosts Assay Makers (News) Jeffery L. Fox
- 115 EPA's First Commercial Release Is Still Pending (News) Jeffery L. Fox
- 116 New Utility Guidelines Ease Fears of GATT (News) Kevin J. McGough
- 118 Designing Rational Therapies for Multiple Sclerosis (News) Lawrence Steinman, Paul Conlon
- 120 Using Fungal Dressings to Heal Wounds (News) Bernard Dixon
- 122 Artificial Life: Biotechnology in the 21st Century? (Article) Gene Levinson
- 124 Wellcome Reaches Out and Up (Article) John Hodgson
- 127 Tumor Suppressor Genes: Prospects for Cancer Therapies (Article) Arthur H. Bertelsen, Gary A. Beaudry, Timothy J. Stoller, Paul P. Trotta, Michael I. Sherman
- 133 X-Ray Crystallography at Extremely Low Temperatures (Biotoools) Keith Moffat
- 134 Molecular Structure the Electron Spectroscopic Way (Biotoools) David Bazett-Jones
- 137 Detecting Individual Genetic Variation (Biotoools) Jan Vijg
- 140 Responding to "Merger Mania" (Biotoools) John J. Egan III, R. Todd Cronan, Joseph L. Johnson III
- 142 Production of Polyhydroxyalkanoates, a Family of Biodegrad-

- able Plastics and Elastomers, in Bacteria and Plants (Review) Yves Poirier, Christiane Newirth, Chris Somerville
- 151 Red-Shifted Excitation Mutants of the Green Fluorescent Protein (Research) Simon Delagrave, Rachael E. Hawtin, Christopher M. Silva, Mary M. Yang, Douglas C. Youvan
- 155 Engineered Fv Fragments as a Tool for the One-Step Purification of Integral Multisubunit Membrane Protein Complexes (Research) Gerald Kleymann, Christian Ostermeier, Bernd Ludwig, Arne Skerra, Hartmut Michel
- 161 An Allosteric Hammerhead Ribozyme (Research) Helena Porta, Paul M. Lizardi
- 165 Binding Epitope of Somatostatin Defined by Phage-Display Peptide Libraries (Research) Richard M. Wright, Hermann Gram, Anthony Vattay, Susan Byrne, Phil Lake, Diane Dottavio
- 170 Recent Advances in the Large-Scale Fermentation of *Neisseria meningitidis* Group B for the Production of an Outer Membrane Protein Complex (Research) Jeffrey Fu, F. James Bailey, Joseph J. King, Charles B. Parker, R.S. Robin Robinett, D. Garrett Kolodin, Hugh A. George, Wayne Herber
- 175 Tight Transcriptional Control Mechanism Ensures Stable High-Level Expression from T7 Promoter-Based Expression Plasmids (Research) Nico Mertens, Erik Remaut, Walter Fiers
- 191 The Constant Presence of Death (Editorial) Edward Golub

March

- 199 Solvent Mapping and Molecular Recognition (Editorial) Susan Hassler
- 200 CPMV Versus TMV/Freeze/Thaw Isolation/Biotech Obsolescence/ "Don't Need, Don't Look"
- 202 Microbial Biotech: Less Glamorous, but Effective (Commentary) Bernard Dixon
- 204 Clinton Budget Boosts Biotech R&D Spending (News) Jeffery L. Fox
- 205 FDA Advisory Panel Okays HIV Vaccine (News) Jeffery L. Fox
- 206 Biotech Plays Big Role in Efforts Against AIDS (News) Jeffery L. Fox
- 208 Drug Firms Need Biotech Drug Discovery (News) David Stone
- 211 A Porter Analysis of the Com-Genetics Industry (News) George Kidd, James Dvorak
- 212 EU Agrees on Patents but Nixes BST for 5 Years (News) Mike Ward
- 213 User Fees Hold Up EU Agency for Drug Approvals (News) Mike Ward
- 214 Clinton Gears Up for Republican Deregulation (News) Russ Hoyle
- 216 We Must Boost Public Acceptance of Biotech (News) Rick Walter
- 219 Pheromone Firms Cooperate to Speed Approvals (News) Vicki Glaser
- 222 The Vector Void in Gene Therapy (Article) Claude P. Hodgson
- 226 Improving Clinical Trials Cost Management in Biotech Companies

- (Article) Brent N. Cavan
- 231 Does Less Mean More for the Genome Projects? (Article) John Hodgson
- 236 Virtual Spectroscopy for Fun and Profit (Article) Irena Cosic
- 239 From Data to Drugs (Article) Tony Marchington
- 243 Biological Materials Transfer Agreements (Biotoools) Michael A. Gollin
- 245 What's Brewing in Barley Biotechnology? (Review) David McElroy, Jake Jacobsen
- 250 Production of High Solids Tomatoes Through Molecular Modification of Levels of the Plant Growth Regulator Cytokinin (Research) Belinda Martineau, Kristin R. Summerfelt
- 255 Generation of Rabbit Monoclonal Antibody Fragments from a Combinatorial Phage Display Library and Their Production in the Yeast *Pichia pastoris* (Research) Rüdiger Ridder, Rita Schmitz, Francois Legay, Hermann Gram
- 261 A Hybrid Baculovirus-Bacteriophage T7 Transient Expression System (Research) Frank van Poelwijk, René Broer, Graham J. Belsham, Peter Oudshoorn, Just M. Vlak, Rob W. Goldbach
- 265 Phage Libraries Displaying Cyclic Peptides with Different Ring Sizes: Ligand Specificities of the RGD-Directed Integrins (Research) Erkki Koivunen, Bingcheng Wang, Erkki Ruoslahti
- 271 A Chromosome Integration System for Stable Gene Transfer into *Thermus flavus* (Research) J. Mark Webber, Scot P. Johnson, Veronika Vonstein, Malcolm J. Casadaban, David Demirian
- 276 A Computer Program to Determine a Protein Sequence from an Amino Acid Analysis (Research) Françoise Cordier-Ochsenbein, Stephane Cordier, Françoise Russo-Marie
- 288 Cuba's Biotechnology and the United States Embargo (Editorial) Harvey Bialy

April

- 305 European Patent Legislation: A Missed Opportunity (Editorial) Susan Hassler
- 306 Is Virtual Spectroscopy Real? (Correspondence)
- 308 A Vindication of Plant Transgenics (Commentary) Bernard Dixon
- 310 Drug Companies Like Combinatorial Chemistry (News) Vicki Glaser
- 311 European Biotech Is Gaining Momentum (News) Mike Ward
- 313 CEOs Must Seek Pharmaceutical Partners Now (News) Gregory Brown, Peter Drake
- 314 For AIDS, the FDA May Be Reforming Itself (News) Jeffery L. Fox
- 316 Biotech Needs an Industry/Government Initiative (News) Russ Hoyle
- 318 Defining the Scope of Biotech Patent Claims (News) Kevin J. McGough
- 319 New Tools for Biotech Product Development (News) Steven Quay
- 322 Biotech Must Consider Sales Incentives (News) George Kidd, James Dvorak

Volume 13 1995 Index

- 323 Group I Introns: New Molecular Mechanisms for mRNA Repair (Article) Thomas Cech
- 327 RNase P in Research and Therapy (Article) Sidney Altman
- 333 To Treat or Not to Treat: That Is the Question for Serum (Article) John Hodgson
- 347 The CENB Advantage (Biotoools) Rich Lysakowski
- 351 Combinatorial Drug Discovery: Which Methods Will Produce the Greatest Value? (Review) David J. Ecker, Stanley T. Crooke
- 362 Amplification of a Chimeric *Bacillus* Gene in Chloroplasts Leads to an Extraordinary Level of an Insecticidal Protein in Tobacco (Research) Kevin E. McBride, Zora Svab, David J. Schaaf, Patrick S. Hogan, David M. Stalker, Pal Maliga
- 366 Expression of Thioredoxin Random Peptide Libraries on the *Escherichia coli* Cell Surface as Functional Fusions to Flagellin: A System Designed for Exploring Protein-Protein Interactions (Research) Zhijian Lu, Kristin S. Murray, Victor Van Cleave, Edward R. LaVallie, Mark L. Stahl, John McCoy
- 373 Calmodulin as a Versatile Tag for Antibody Fragments (Research) Dario Neri, Claudia de Lalla, Heike Petrus, Paolo Meri, Greg Winter
- 378 Surface Expression and Ligand-Based Selection of cDNAs Fused to Filamentous Phage Gene VI (Research) Laurent S. Jespers, Joris H. Messens, Annick De Keyser, Dominique Eeckhout, Ilse Van Den Brande, Yannick G. Ganssemans, Marc J. Lauwereys, George P. Vlasuk, Patrick E. Stanssens
- 383 Phosphoric Acid Entrapment Leads to Apparent Protein Heterogeneity (Research) Michael Fountoulakis, Francis Vilbois, Gottfried Oesterhelt, Walter Vetter
- 389 Production of Recombinant Proteins in Chinese Hamster Ovary Cells Using a Protein-Free Cell Culture Medium (Research) Michael Zang, Helmut Trautmann, Christine Gandor, Ferruccio Messi, Fred Asselbergs, Christian Leist, Armin Fiechter, Jakob Reiser
- 410 Three M's for Successful Tech Transfer (Editorial) Jeanie L. McGuire

May

- 417 Bananas and Biotech Consumers (Editorial) Susan Hassler
- 418 Serum Situation (Correspondence)
- 420 The Third Vaccine Revolution (Commentary) Bernard Dixon
- 422 152 U.S. Biopharmaceutical Firms Lose \$1.3 Billion (News) Vicki Glaser
- 425 The U.K. Biotech Sector Isn't Down and Out (News) Mike Ward
- 426 Acquisition as a Best-Case Scenario (News) Fariba Fischel Ghodsi
- 429 Gene Therapy's New Business Plan (News) Robert Abbott
- 431 Review of NIHRAC Focuses on

- Gene Therapy (News) Jeffery L. Fox
- 433 Mycogen Magically Turns Around Agrigenetics (News) George Kidd
- 434 EPA Okays First Pesticidal Transgenic Plants (News) Russ Hoyle
- 435 Pharmacoeconomics: Drug Pricing's New Guise (News) Jeffery L. Fox
- 439 Nanotechnology's Many Disciplines (Article) Daniel Thomas
- 445 The Era of Intracellular Nucleic Acid Technology (Article) Ronnie A. Ray, Penelope J. Cooper, Andrew J. Wakefield
- 449 Clinical Systems for the Production of Human Cells and Tissues (Article) R. Douglas Armstrong, Walter C. Ogier, James Mahuta
- 454 Pots to Plots: Recombinant Plants on Trial (Article) Patricia Ahl Goy, John H. Duesing
- 460 Intellectual Property Under GATT (Biotoools) Elizabeth Enayati
- 463 Managing Clinical Data (Biotoools) Suzanne Bishop, Ronald Eng
- 468 Phytoremediation: A Novel Strategy for the Removal of Toxic Metals from the Environment Using Plants (Review) David E. Salt, Michael Blaylock, Nanda P.B.A. Kumar, Viatcheslav, Dushenkov, Burt D. Ensley, Ilan Chet, Ilya Raskin
- 475 Antibody VH Domains as Small Recognition Units (Research) Julian Davies, Lutz Riechmann
- 481 Genetic Transformation of Banana and Plantain (*Musa* spp.) via Particle Bombardment (Research) László Sági, Bart Panis, Serge Remy, Hilde Schoofs, Kris De Smet, Rony Swennen, Bruno P.A. Cammue
- 486 Generation of Transgenic Banana (*Musa acuminata*) Plants via *Agrobacterium*-Mediated Transformation (Research) Gregory D. May, Rowan A. Faza, Hugh S. Mason, Alicja Wiecko, Frantisek J. Novak, Charles J. Arntzen
- 493 Aggregation of a Lyophilized Pharmaceutical Protein, Recombinant Human Albumin: Effect of Moisture and Stabilization by Excipients (Research) Henry R. Constantino, Robert Langer, Alexander M. Klibanov
- 498 A System for Production of Commercial Quantities of Human Lactoferrin: A Broad Spectrum Natural Antibiotic (Research) Pauline P. Ward, Christopher S. Piddington, Grainne A. Cunningham, Xiaodong Zhou, Roger D. Wyatt, Orla M. Conneely
- 504 Improved N-terminal Processing of Recombinant Proteins Synthesized in *Escherichia coli* (Research) Kathleen Sandman, Rowan A. Grayling, John N. Reeve
- 507 Protease-Dependent Streptomycin Sensitivity in *E. coli*—A System for Protease Inhibitor Selection (Research) Robert F. Balint, Ingrid Plooy
- 522 Involving Molecular Biology in Biodiversity (Editorial) Angela Karp, David S. Ingram

June

- 529 Managed Innovation? (Editorial) Susan Hassler
- 530 Force in Nanotechnology (Correspondence)
- 532 Public Understanding Doesn't Always Lead to Public Support (Commentary) Bernard Dixon
- 534 Pfizer Targets Genomics Through Pfizergen (News) Vicki Glaser
- 535 Rhein Biotech Plans to Produce Biogenics (News) Mike Ward
- 536 Seeking to Commercialize Apoptosis Research (News) David Stone
- 538 Low-Tech Woes Derail Calgene's High-Tech Tomato (News) Russ Hoyle
- 541 15 U.S. Agbiotech Firms Lose \$102 Million (News) George Kidd
- 542 Using Foreign Exchange to Maximize Profits (News) Otto Ruesch
- 544 Biodiversity Promises Great Prospecting (News) Jeffery L. Fox
- 545 Momentum to Reform FDA is Building (News) Jeffery L. Fox
- 546 Burroughs Wellcome Blurs Nature of Inventions (News) John Storella, Kevin Bastian
- 549 Searching Sequence Space (Article) Willem P.C. Stemmer
- 554 Remodeling MMPs (Article) John Hodgson
- 559 Managing a Crisis in Clinical Trials (Biotoools) John J. Egan III, R. Todd Cronan, Joseph L. Johnson III
- 563 NASBA (Nucleic Acid Sequence-Based Amplification) (Biotoools) Roy Sooknunan, Lawrence T. Malek
- 565 Biomaterials in Tissue Engineering (Review) Jeffrey A. Hubbell
- 577 Transgenic Canola and Soybean Seeds with Increased Lysine (Research) S.C. Falco, T. Guida, M. Locke, J. Mauvais, C. Sanders, R.T. Ward, P. Webber
- 583 Whole-Virus Vaccine Development by Continuous Culture on a Complementing Host (Research) Deyu Kong, John Yin
- 587 Expression of Multiple Eukaryotic Genes from a Single Promoter in *Nicotiana* (Research) Susanne Beck von Bodman, Leslie L. Domler, Stephen K. Farrand
- 592 N-Glycosylation of Recombinant Human Interferon- γ Produced in Different Animal Expression Systems (Research) David C. James, Robert B. Freedman, Michael Hoare, Olotu W. Ogonah, Barrie C. Rooney, Oleg A. Larionov, Vasily N. Dobrovolsky, Oleg V. Lagutin, Nigel Jenkins
- 597 A Fiber-Optic Carbon Dioxide Sensor for Fermentation Monitoring (Research) Mahesh Uttamail, David R. Walt
- 602 Improved Adenovirus Vector Produces Herpes Simplex Virus Ribonucleotide Reductase R1 and R2 Subunits More Efficiently than Baculovirus Vector (Research) Bernard Massie, Julie Dionne, Nathalie Lamarche, Johanne Fleurent, Yves Langelier
- 618 Ethics and Peer Review (Editorial) David Goodstein

July

- 625 Going to Extremes (Editorial) Susan Hassler
- 626 Changing Serum's Mind-Set (Correspondence)
- 628 The War on Microbes: Overcoming Resistance, Enhancing Immunity (Commentary) Bernard Dixon
- 632 U.S. Biopharm Firms Up R&D Spending 35% (News) Vicki Glaser
- 635 FDA Advisors Okay NeXstar's DaunoXome (News) Jeffery L. Fox
- 636 Should the FDA Emulate Europe's EMEA? (News) Mike Ward
- 638 Biotech Financing Remains a Tough Row to Hoe (News) J. Casey McGlynn, Grant Heidrich
- 640 FDA Patent-Life Extension Offers Brief Reprieve (News) Gregory Brown, Peter Drake
- 642 Does the First to Reach the Market Always Win? (News) George Kidd, James Dvorak
- 643 Don't Dismiss Rifkin's Damning of Gene Patents (News) Russ Hoyle
- 644 Full Bacterial DNA Sequences Boost Genomics (News) Jeffery L. Fox
- 647 Structural and Functional Epitopes in the Growth Hormone Receptor Complex (Article) James A. Wells
- 652 From Cells to Sales (Article) Neil Bradman, Vivian Moses
- 656 Patenting DNA Sequences (Biotoools) Michael D. Yablonsky, William J. Hone
- 658 Protein Modeling by E-mail (Biotoools) Manuel C. Pietsch
- 662 Extremozymes: Expanding the Limits of Biocatalysis (Review) Michael W.W. Adams, Francine B. Perler, Robert M. Kelly
- 669 Directed Evolution of a Subtilisin with Calcium-Independent Stability (Research) Susan L. Strausberg, Patrick A. Alexander, D. Travis Gallagher, Gary L. Gilliland, B.L. Barnett, Philip N. Bryan
- 674 Biological Production of Semisynthetic Opiates Using Genetically Engineered Bacteria (Research) Christopher E. French, Anne M. Hailes, Deborah A. Rathbone, Marianne T. Long, David L. Willey, Neil C. Bruce
- 677 Germline Transformation of Maize Following Manipulation of Chimeric Shoot Meristems (Research) Keith Lowe, Ben Bowen, George Hoerster, Margit Ross, Diane Bond, Dottie Pierce, Bill Gordon-Kamm
- 683 Polyclonal Preparations of Anti-Tetanus Toxoid Antibodies Derived from a Combinatorial Library Confer Protection (Research) Alois B. Lang, Monique Vogel, Jean-François Viret, Beda M. Stadler
- 686 Genetic Engineering of Rice for Resistance to Sheath Blight (Research) Willie Lin, C.S. Anuratha, Karabi Datta, Ingo Potrykus, S. Muthukrishnan, Swapna K. Datta
- 692 Removal of Sialic Acid from a Glycoprotein in CHO Cell Culture Supernatant by Action of an Extracellular CHO Cell Sialidase (Research) Michael J. Gramer, Charles F. Gooch, Valerie Y. Chock, David T. Brousseau, Mary B. Stiwowski
- 714 There's a Whole Lot of Nothing Going On (Editorial) John Hodgson

August

- 721 In the Regulatory Game, It's Hard to Tell the Players, Even with a Scorecard (Editorial) Susan Hassler
- 722 Searching Sequence Space (Correspondence)
- 724 Predicting the Future of Human Health (Commentary) Bernard Dixon
- 728 Liposomal Antifungals Battle for Market Share (News) Vicki Glaser
- 729 In All, Wall Street Supports Biotech Acquisitions (News) Fariba Fischel Ghodisian
- 731 Are CEOs the Biggest Obstacle to Consolidation? (News) Nick Arvanitidis
- 732 14 U.S. Agbiotech Firms Up R&D Spending 3.2% (News) George Kidd
- 733 Europe and Japan Will Form Working Group (News) Mike Ward
- 734 The Rise and Fall of the EU Patent Directive (News) N.R. Scott-Ram, A.G. Sheard
- 735 Biotech Is Still Searching for a Bioethics Forum (News) Russ Hoyle
- 737 Analyzing the Science and Ethics of Xenografts (News) Jeffery L. Fox
- 741 Automating Molecular Biology: A Question of Communication (Article) Jean Peccoud
- 746 Barrier Isolation for Clean Drugs and Safer Workers (Biotoools) John E. Benbough, Peter Hambleton, Barry Thornton
- 752 Germany: A Dominant Force by the Year 2000? (Special Section: Regional Development) Stephen M. Edgington
- 757 The French Evolution of Biotechnology (Special Section: Regional Development) Shyama V. Ramani
- 760 From Little Acorns... (Special Section: Regional Development) John Hodgson
- 763 Bridges to Biodevelopment (Special Section: Regional Development) Sinja Sveinsdottir
- 765 Should You Relocate? (Special Section: Regional Development) Compiled by Musa Mhlanga, Louise Dughan
- 767 International Guide to Regional Development Organizations (Special Section: Regional Development)
- 773 Mining with Microbes (Review) Douglas E. Rawlings, Simon Silver
- 779 Human IgA Monoclonal Antibodies Specific for a Major Ragweed Pollen Antigen (Research) Lee K. Sun, Michael S.C. Fung, William N.C. Sun, Cecily R.Y. Sun, Wen-I Chang, Tse Wen Chang
- 787 Production of Monoclonal Antibodies Using a Secretion Capture Report Web (Research) John S. Kenney, Forest Gray, Marie-Hélène Ance, John F. Dunne
- 791 Targeted Insertion of Foreign Genes into the Tobacco Plastid Genome Without Physical Linkage to the Selectable Marker Gene (Research) Helaine Carrer, Pal Maliga
- 795 Highly Efficient Enzyme Recovery Using a Porous Membrane with Immobilized Tentacle Polymer Chains (Research) Seiji Matoba, Satoshi Tsuneda, Kyoichi Saito, Takanobu Sugo

- 798 Immobilization in Alginate-Silicate Sol-Gel Matrix Protects β -Glucosidase Against Thermal and Chemical Denaturation (Research) Ora Heichal-Segal, Sara Rappoport, Sergei Braun
- 801 Improved Mimicry of a Foot-and-Mouth Disease Virus Antigenic Site by a Viral Peptide Displayed on β -Galactosidase Surface (Research) Antoni Benito, Mauricio G. Mateu, Antonio Villaverde
- 818 Brazil's Stake in Biotechnology (Editorial) Heinz Redwood

September

- 925 Reproductive Technologies, Reproductive Responsibilities (Editorial) Susan Hassler
- 926 Just the Flax/*Fatal* Bovine Serum?/FBS Details (Correspondence)
- 928 Journal Publishing in the Economically Developing World (Commentary) Bernard Dixon
- 932 Japanese Firms Increase Global Biotech Activities (News) Mike Ward
- 933 U.S. Skin-Replacement Market Could Heat Up (News) Vicki Glaser
- 934 Biotechnology: Acquired or Consumed? (News) Joseph Rubinfeld
- 936 Was Genentech's Raab a Victim of Obsolescence? (News) Russ Hoyle
- 937 Wrapping Seeds Increases Yields and Lowers Losses (News) George Kidd
- 939 FDA Financial Disclosure Plan Flops (News) Jeffery L. Fox
- 940 HIV Protease Inhibitors Head to Market (News) David Stone
- 945 Biotech's Platform Technologies Lure Big Pharma (Article) John Hodgson
- 949 Measure for Measure (Article) Louise Dughan
- 955 An Algorithm for the Oversight of Field Trials in Economically Developing Countries (Article) Henry I. Miller, David W. Altman, John H. Barton, Susanne L. Huttner
- 961 Making New Scientists, One at a Time (Article) Louis Levinger
- 962 Utility in Biotech Patent Applications (Biotoools) Nancy J. Linck, Scott A. Chambers
- 965 Affinity Fingerprinting (Biotoools) Lawrence M. Kauvar
- 968 Recent Advances in Reproductive Genetic Technologies (Review) Gene Levinson, Carolyn B. Coulam, W. Christine Spence, Richard J. Sherrins, Joseph D. Schulman
- 974 Design, Expression, and Initial Characterization of MB1, A *De Novo* Protein Enriched in Essential Amino Acids (Research) M. Beauregard, C. Dupont, R.M. Teather, Mary A. Hefford
- 982 Production of Recombinant Bovine Enterokinase Catalytic Subunit in *Escherichia coli* Using the Novel Secretory Fusion Partner DsbA (Research) Lisa A. Collins-Racie, James M. McColgan, Kathleen L. Grant, Elizabeth A. DiBlasio-Smith, John M. McCoy, Edward R. LaVallie
- 988 A Biotechnological Method Provides Access to Aggregation Competent Monomeric Alzheimer's 1-42 Residue Amyloid Peptide (Research) Heinz Döbeli, Nicholas

Volume 13 1995 Index

- Dräger, Gerda Huber, Peter Jakob, Dieter Schmidt, Bernd Seilheimer, Dietrich Stüber, Beat Wipf, Martin Zulauf
- 994 Instability of Transgene Expression in Field Grown Tobacco Carrying the *carl-1* Gene for Sulfonyleurea Herbicide Resistance (Research) J.E. Brandle, S.G. McHugh, L. James, H. Labbé, B.L. Miki
- 999 Double Replacement Gene Targeting for the Production of a Series of Mouse Strains with Different Prion protein Gene Alterations (Research) Richard C. Moore, Nicola J. Redhead, Jim Selfridge, James Hope, Jean C. Manson, David W. Melton
- 1005 Transovarian Transmission of a Foreign Gene in the Silkworm, *Bombyx mori*, by *Autographa californica* Nuclear Polyhedrosis Virus (Research) Hajime Mori, Masafumi Yamao, Hiroshi Nakazawa, Yusuke Sugahara, Nobuaki Shirai, Fujiohshi Matsubara, Motoyuki Sumida, Toshikatsu Imamura
- 1022 Online Education Program Helps Teachers Teach Science (Editorial) Geoff Teeter

October

- 1029 Grace Under Fire (Editorial) Susan Hassler
- 1030 Science and Science Journals/Bridge to Nowhere?/Three Reviewer Rule/A Missing Category/German Gene Therapy (Correspondence)
- 1032 Do World Leaders Have Adequate Access to Scientific Information? (Commentary) Bernard Dixon
- 1035 EPA Okays *Bt* corn; USDA Eases Plant Testing (News) Jeffery L. Fox
- 1038 Pharmacia Challenges Genentech in rhGH Market (News) Vicki Glaser
- 1040 After the Drought, a Revitalized Industry (News) Gregory B. Brown, Peter F. Drake
- 1042 R&D Consortia May Be Both Legal and Logical (News) George Kidd
- 1043 Gingrich's Deregulatory Push Has Lost Momentum (News) Russ Hoyle
- 1046 "Baculophage:" A New Tool for Protein Display (News) Anthony H. Davies
- 1048 In Germany, Biotech Resistance Leads to Progress (News) Mike Ward
- 1050 Using Viral Genes to Fight Disease (Article) Stephen M. Edgington
- 1056 Biotechnology of Diagnostics: Emerging Opportunities (Article) Michael G. Rusnak
- 1060 Obesity: Where Less Is More (Article) John Hodgson
- 1065 The Infringement Exemption (Biotoools) Carroll E. Neesemann, James E. Hough
- 1068 Designing Biosafe Laboratories (Biotoools) William N. Bernstein
- 1072 Process Synthesis for Multi-Step Microbial Conversion (Review) Carolynne T. Marshall, John M. Woodley

- 1079 Eukaryotic Virus Display: Engineering the Major Surface Glycoprotein of the *Autographa californica* Nuclear Polyhedrosis Virus (AcNPV) for the Presentation of Foreign Proteins on the Virus Surface (Research) Yvan Boublik, Paola Di Bonito, Ian M. Jones
- 1085 Inhibition of Fungal Disease Development in Plants by Engineering Controlled Cell Death (Research) Günther Strittmatter, Jan Janssens, Chris Opsomer, Johan Botterman
- 1090 High-Level Production and Long-Term Storage of Engineered Antibodies in Transgenic Tobacco Seeds (Research) Ulrike Fielder and Udo Conrad
- 1094 "Horizontal" Gene Transfer from a Transgenic Potato Line to a Bacterial Pathogen (*Erwinia chrysanthemi*) Occurs—If at All—at an Extremely Low Frequency (Research) Kirsten Schlüter, Johannes Fütterer, Ingo Potrykus
- 1101 The Intracellular Domain of Rabbit Prolactin Receptor Is Able to Promote the Secretion of a Passenger Protein via an Unusual Secretory Pathway in Lepidopteran Cells (Research) Laurence Garnier, Claire Cahoreau, Gérard Devauchelle, Martin Cérutti
- 1105 Human Stress Protein hsp70: Overexpression in *E. coli*, Purification, and Characterization (Research) Satish Jindal, Peter Murray, Stanley Rosenberg, Richard A. Young, Kevin P. Williams
- 1110 Redox State of Single-Chain Fv Fragments Targeted to the Endoplasmic Reticulum, Cytosol, and Mitochondria (Research) Silvia Biocca, Francesca Ruberti, Marco Tafani, Paola Pierandrei-Amaldi, Antonino Cattaneo
- 1132 The Recombinant DNA Controversy: Twenty Years Later (Editorial) Paul Berg, Maxine Singer

November

- 1141 Bread and Biotechnology (Editorial) Susan Hassler
- 1142 ABRAC Oversight, Swiss Biotechnology Policy (Correspondence)
- 1144 Mobilizing Microbes in Defense of the Environment (Commentary) Bernard Dixon
- 1149 Lilly and Millenium Cut the Genome Cake a New Way (News) Vicki Glaser
- 1152 End of Biotechnology Era, Warns SB's Poste (News) Stephen M. Edgington
- 1154 Technology: A Safety Net for High-Risk Acts (News) Fariba Fischel Ghodisian
- 1156 Politics Could Hamper FDA Reform (News) Jeffery L. Fox
- 1157 Agbiotech Goes Canadian (News) George Kidd
- 1158 Site-Specific Strategies Stylize Streptavidin (News) Patricia Weber
- 1158 Mammalian Cell Technology: Secretion on Demand (News) Philip J. Barr

Volume 13 1995 Index

- 1159 Fig Hearts in the Clinic Next Year? (News) Barbara Nasto
- 1163 Pinning Down a Moving Target: A Standard HIV (News) Jeffery L. Fox
- 1164 Necn Underscores Need for U.S. Biodiversity Role (News) Russ Hoyle
- 1165 UNESCO Centers on Biotechnology (News) Indra Vasil
- 1167 Nervous Excitement over Neurotrophic Factors (Article) Gary Walsh
- 1172 Enabling Technologies and the Business of Science (Article) Aris Persidis
- 1178 Bringing Stability to Biotech Patents (Biotech) Michael Kirschner
- 1180 Engineering Microprotein Ligands for Large-Scale Affinity Purification (Biotech) John MacLennan
- 1185 Biotechnology of Breadmaking: Unraveling and Manipulating the Multiprotein Gluten Complex (Review) Peter R. Shewry, Arthur S. Tatham, Francisco Barro, Pilar Barcelo, Paul Lazzeri
- 1191 Regulated Secretion of Prolactin by the Mouse Insulinoma Cell Line bTC-3 (Research) Keqin Chen, Gregory N. Stephanopoulos, Anthony J. Sinskey, Harvey F. Lodish
- 1198 Engineered Chimeric Streptavidin Tetramers as Novel Tools for Bioseparations and Drug Delivery (Research) Ashutosh Chilkoti, Brenda L. Schwartz, Richard D. Smith, Cynthia J. Long, Patrick S. Stayton
- 1205 Transdermal Delivery of Heparin by Skin Electroporation (Research) Mark R. Prausnitz, Elazer R. Edelman, J. Aura Gimm, Robert Langer, James C. Weaver
- 1211 A High-Capacity Assay for Inhibitors of Human Papillomavirus DNA Replication (Research) Mary Plumpton, Nigel A. Sharp, Laura H. Liddicott, Maido Remm, Dale O. Tucker, Fiona J. Hughes, Stuart M. Russell, Michael A. Romanos
- 1215 A Generic Method for Expression and Use of "Tagged" Soluble Versions of Cell Surface Receptors (Research) Erik A. Whitehorn, Emily Tate, Stephen Y. Yanofsky, Lynn Kochersperger, Ann Davis, Richard B. Mortensen, Shirlee Yonkovich, Kim Bell, William J. Dower, Ronald W. Barrett
- 1221 Rapid Assay of Phage-Derived Recombinant Human Fabs As Bispecific Antibodies (Research) Pietro Paolo Sanna, Alessandra De Logu, R. Anthony Williamson, Maria E. Samson, Dario C. Alteri, Floyd E. Bloom, Dennis R. Burton
- 1225 Expression of the Human Muscarinic Receptor Gene m2 in *Dictyostelium discoideum* (Research) Guido Voith and Theodor Dingermann
- 1230 Expression of Active, Secreted Human Prostate-Specific Antigen by Recombinant Baculovirus-Infected Insect Cells on a Pilot Scale (Research) Riitta Kurkela, Anna-Kaisa Herrala, Pirkko Henttu, Heini Nal, Pirkko Vihko
- 1246 The Diverse Potential of Yeast (Editorial) Ian N. Roberts, Howard G. Wildman

December

- 1421 Growing Biotechnology at the Fringes (editorial) John Hodgson
- 1424 Transgenic Technology and Animal Welfare (Commentary) Bernard Dixon
- 1427 Facing the Challenge of Combination Vaccines (News) Jeffery L. Fox
- 1428 Wyeth-Ayerst and Apollon Sign Vaccine Deal (News) Vicki Glaser
- 1428 European Food Rules Creep Forward (News) Mike Ward
- 1429 Media Mutates Mouse with Human Ears (News) Russ Hoyle
- 1431 Bioethics Commission to Review Gene Patenting (News) Les Rothenberg
- 1431 Fishing for Protein Interactions with Tribrids (News) Jeremy Paul, Josh Trueheart
- 1434 A New Use for the Mycoprotein Organism (News) Marilyn Wiebe
- 1435 The Many Faces of IL-12 (News) Mima Predich
- 1438 The Cost of Delivering Drugs Without Needles (Article) Bob Damms, William Bains
- 1442 Therapeutic Applications of Heat Shock Proteins (Article) Stephen M. Edgington
- 1449 Capillary Electrophoresis-Based Immunoassays (Biotech) Tom Pritchett, Ramon A. Evangelista, F-T.A. Chen
- 1446 Patenting Biotechnology: When the Means Justify the End (Biotech) Bill Thomson, Jr., Susan Gammon
- 1452 Mammary Gland Expression of Transgenes and the Potential for Altering the Properties of Milk (Review) Elizabeth A. Maga, James D. Murray
- 1458 Field Evaluation of Transgenic Squash Containing Single or Multiple Virus Coat Protein Gene Constructs for Resistance to Cucumber Mosaic Virus, Watermelon Mosaic Virus 2, and Zucchini Yellow Mosaic Virus (Case Studies in Product Development) D.M. Tricoli, Kim J. Carney, Paul F. Russell, J. Russell McMaster, David W. Groff, Keisha C. Hadden, Phyllis T. Himmel, Jon P. Hubbard, Maury L. Boeshore, Hector D. Quemada
- 1466 Resistance of Transgenic Hybrid Squash ZW-20 Expressing the Coat Protein Genes of Zucchini Yellow Mosaic Virus and the Watermelon Mosaic Virus 2 to Mixed Infections by Both Polyviruses (Case Studies in Product Development) Marc Fuchs and Dennis Gonsalves
- 1474 The Yeast Tribid System—Genetic Detection of *Trans*-Phosphorylated ITAM-SH2-Interactions (Research) Mark A. Osborne, Stephen Dalton, Jarema P. Kochan
- 1479 *Fusarium graminearum* A 3/5 as a Novel Host for Heterologous Protein Production (Research) John C. Royer, Donna L. Moyer, Sarah G. Reiwit, Mark S. Madden, Ejner Bech Jensen, Stephen H. Brown, Cynthia C. Yonker, James A. Johnstone, Elizabeth J. Golightly.

- Wendy T. Yoder, Jeffery R. Shuster
- 1484 Expression of the Rabies Virus Glycoprotein in Transgenic Tomatoes (Research) Peter B. McGarvey, John Hammond, Margaret M. Dieneult, D. Craig Hooper, Zhen Fang Fu, Bernhard Dietzschold, Hilary Koprowski, Frank Michaels
- 1488 Field Release of a Genetically Modified *Pseudomonas fluorescens* on Wheat: Establishment, Survival, and Dissemination (Research) Francis A.A.M. de Leij, Emma J. Sutton, John M. Whipps, John S. Fenlon, James M. Lynch
- 1493 Survival, Colonization, and Dispersal of Genetically Modified *Pseudomonas fluorescens* SBW25 in the Phytosphere of Field Grown Sugar Beets (Research) Ian P. Thompson, Andrew K. Lilley, Richard J. Ellis, Penny A. Bramwell, Mark J. Bailey
- 1498 Preparative Scale Purification of Recombinant Proteins to Clinical Grade by Isotachopheresis (Research) A.W. Stowers, Kevin J. Spring, Allan Saul
- 1510 Labeling of "Biotech Foods" Is No Free Lunch (Editorial) Henry Miller

Special International Buyers' Guide

- 1406 From Cells To Sales: Competition, selection, and evolution in the marketing of products and services Neil Bradman, Vivian Moses
- 1263 Antibodies and Antigens
- 1272 Bacterial and Cell Analysis
- 1274 Balances, Scales and other Gravitometric Equipment
- 1275 Biotechnology Industry Services
- 1278 Chromatographic Equipment and Accessories
- 1290 Clinical Diagnostic Instruments, Systems and Accessories
- 1295 Clinical Research Organizations
- 1295 Computer Hardware, Software and Accessories
- 1298 Electrophoresis Apparatus
- 1302 Fermentors, Bioreactors, and Cell Culture Equipment
- 1306 General Molecular Biology
- 1318 Lab and Scientific Apparatus (Centrifuges, Electrochemical, Environmental, Furniture)
- 1319 Laboratory Animals, Cage Accessories, Diets, Housing and other Accessories
- 1330 Laboratory Ware (Ceramics, Glass, Metal and Plastics)
- 1334 Liquid Handling
- 1341 Microscopes and Associated Optical Equipment
- 1344 Nuclear and Luminescence Instrumentation and Accessories
- 1345 Pharmaceutical Intermediates & Bulk Raw Materials
- 1346 Recording Equipment, Electrical and Electronic Apparatus
- 1347 Spectroscopy and Associated Products
- 1352 Technical Services (Analytical and Research)

Author Index

- A**
- Abbott, Robert 429
- Adams, Michael W.W. 662
- Afza, Rowan 486
- Agaisse, Hervé 67
- Alexander, Patrick A. 669
- Alper, Joseph 10, 106
- Alteri, Dario C. 1221
- Altman, David W. xxx
- Altman, Sidney 327
- Ancel, Marie-Hélène 787
- Andersson, Poul 35
- Anuratha, C.S. 686
- Armstrong, R. Douglas 449
- Arntzen, Charles J. 486
- Arvanitidis, Nick 731
- Asselbergs, Fred 389
- B**
- Bailey, F. James 170
- Bailey, Mark J. 1493
- Bains, William 1438
- Balint, Robert F. 507
- Barcelo, Pilar 1185
- Barnett, B.L. 669
- Barr, Philip J. 1158
- Barrett, Ronald W. 1215
- Barro, Francisco 1185
- Barton, John H. 955
- Bastian, Kevin 546
- Bazett-Jones, David 134
- Beaudry, Gary A. 127
- Beauregard, M. 974
- Beck von Bodman, Susanne 587
- Bell, Kim 1215
- Belsham, Graham J. 261
- Benbough, John E. 746
- Benito, Antoni 801
- Berg, Paul 1132
- Bernstein, William N. 1068
- Bertelsen, Arthur H. 127
- Bialy, Harvey 221, 228
- Biocca, Silvia 1110
- Bishop, Suzanne 463
- Blaylock, Michael 468
- Bloom, Floyd E. 1221
- Boeshore, Maury L. 1458
- Bond, Diane 677
- Botterman, Johan 1085
- Boublik, Yvan 1079
- Bowen, Ben 677
- Bradman, Neil 652, 1046
- Bramwell, Penny A. 1493
- Brandle, J.E. 994
- Braun, Sergei 798
- Broer, René 261
- Brousseau, David T. 692
- Brown, Gregory 12, 313, 640, 1040
- Brown, Stephen H. 1479
- Bruce, Neil C. 674
- Bryan, Philip N. 669
- Burns, Mark A. 46
- Burton, Dennis R. 1221
- Byrne, Susan 165
- C**
- Cahoreau, Claire 1101
- Cammue, Bruno P.A. 841
- Carney, Kim J. 1458
- Carrer, Helaine 791

Casadaban, Malcolm J. 271
 Cattaneo, Antonino 1110
 Cavan, Brent N. 226
 Cech, Thomas 323
 Cérutti, Martin 1101
 Chambers, Scott A. 962
 Chang, Tse Wen 779
 Chang, Wen-I 779
 Charoenvit, Yupin 53
 Chauvaux, Josette 67
 Chen, F.-T.A. 1449
 Chen, Keqin 1191
 Chet, Ilan 468
 Chilkoti, Ashutosh 1198
 Chock, Valerie Y. 692
 Collins-Racie, Lisa A. 982
 Conder, Michael J. 58
 Conlon, Paul 118
 Conneely, Orla M. 498
 Conrad, Udo 1090
 Constantino, Henry R. 493
 Cooper, Penelope J. 445
 Cordier, Stéphane 276
 Cortier-Ochsenbein, Françoise 276
 Cosic, Irena 236
 Coulam, Carolyn B. 968
 Crawford, Lorielee 58
 Cronan, R. Todd 140, 559
 Crooke, Stanley T. 25, 351
 Cunningham, Grainne A. 498

D
 Dalton, Stephen 1474
 Damms, Bob 1438
 Datta, Karabi 686
 Datta, Swapan K. 686
 Davies, Anthony H. 1046
 Davies, Julian 475
 Davis, Ann 1215
 De Keyser, Annick 378
 De Lalla, Claudia 373
 De Leij, Frans A.A.M. 1488
 De Logu, Alessandru 1221
 De Smet, Kris 481
 Delagrave, Simon 151
 Demain, Arnold 23
 Demirjian, David 271
 Devauchelle, Gérald 1101
 Di Bonito, Paola 1079
 Diaz, Eduardo 35
 DiBlasio-Smith, Elizabeth A. 982
 Dienelt, Margaret M. 1484
 Dietzschold, Bernhard 1484
 Dingermann, Theodor 1225
 Dionne, Julie 602
 Dixon, Bernard 20, 120, 202, 308, 420, 532, 628, 724, 928, 1032, 1144, 1424
 Döbeli, Heinz 988
 Dobrovolsky, Vasily N. 592
 Domler, Leslie L. 587
 Dottavio, Diane 165
 Dower, William J. 1215
 Draeger, Nicholas 988
 Drake, Peter 12, 313, 640, 1040
 Duesing, John H. 454
 Dughan, Louise 949
 Dunne, John F. 787
 Dupont, C. 974
 Dushenkov, Viatcheslav 468
 Dvorak, James 15, 110, 211, 322, 642

E
 Ecker, David J. 351
 Edelman, Elazer R. 1205
 Edgington, Stephen M. 31, 752, 1050, 1152
 Eeckhout, Dominique 378
 Egan, John J. III 140, 559
 Ellis, Richard J. 1493
 Enayati, Elizabeth 460
 Eng, Ronald 463

Engelberg, C. 109
 Ensley, Burt D. 468
 Evangelista, Ramon A. 1449
 Evans, Lisa L. 46

F
 Falco, S.C. 577
 Falarme, Victoria 53
 Farrand, Stephen K. 587
 Fenlon, John S. 1488
 Fiechter, Armin 389
 Fielder, Ulrike 1090
 Fiers, Walter 175
 Fleurent, Johanne 602
 Fordis, Jean B. 42
 Fountoulakis, Michael 383
 Fox, Jeffery L. 18, 19, 114, 115, 204, 205, 206, 314, 431, 435, 544, 545, 635, 644, 737, 939, 1035, 1156, 1163, 1427
 Fradd, R.B. 109
 Freedman, Robert B. 592
 French, Christopher E. 674
 Fu, Jeffrey 170
 Fu, Zhen Fang 1484
 Fuchs, Marc 1466
 Fung, Michael S.C. 779
 Fütterer, Johannes 1094

G
 Gallagher, D. Travis 669
 Gammon, Susan 1446
 Gandor, Christine 389
 Gansemans, Yannick G. 378
 Garnier, Laurence 1101
 George, Hugh A. 170
 Ghodsian, Fariba Fischel 426, 729, 1154
 Gilliland, Gary L. 669
 Gimm, J. Aura 1205
 Glaser, Vicki 219, 310, 422, 334, 632, 728, 933, 1038, 1149, 1428
 Goldbach, Rob W. 261
 Golightly, Elizabeth J. 1479
 Gollin, Michael A. 243
 Golub, Edward 191
 Gominet, Myriam 67
 Gonsalves, Dennis 1466
 Goochee, Charles F. 692
 Goodstein, David 618
 Gordon-Kamm, Bill 677
 Goy, Patricia Ahl 454
 Gram, Hermann 165, 255
 Gramer, Michael J. 692
 Grant, Kathleen L. 982
 Gray, Forest 787
 Grayling, Rowan A. 504
 Grill, Laurence K. 53
 Groff, David W. 1458
 Guida, T. 577

H
 Hadden, Keisha C. 1458
 Hailes, Anne M. 674
 Hambleton, Peter 746
 Hammond, John 1484
 Hassler, Susan 7, 103, 199, 305, 417, 529, 625, 721, 925, 1029, 1141
 Hawtin, Rachael E. 151
 Hefford, Mary A. 974
 Heichal-Segal, Ora 798
 Heidrich, Grant 638
 Henttu, Pirkko 1230
 Herber, Wayne 170
 Herbers, K. 63
 Herrala, AnnaKaisa 1230
 Himmel, Phyllis T. 1458
 Hoare, Michael 592
 Hodgson, Claude P. 222
 Hodgson, John 38, 124, 231, 333, 554, 714, 760, 945, 1060, 1421
 Hoerster, George 677
 Hoffman, Stephen L. 53

Hogan, Patrick S. 362
 Hone, William J. 656
 Hooper, D. Craig 1484
 Hope, James 999
 Hough, James E. 1065
 Hoyle, Russ 12, 112, 214, 316, 434, 538, 643, 735, 936, 1043, 1164, 1429
 Hubbard, Jon P. 1458
 Hubbell, Jeffrey A. 565
 Huber, Gerda 988
 Hughes, Fiona J. 1211
 Huttner, Susanne L. 955

I
 Imamura, Toshikatsu 1005
 Ingram, David S. 522

J
 Jacobsen, Jake 245
 Jakob, Peter 988
 James, David C. 592
 James, L. 994
 Janssens, Jan 1085
 Jenkins, Nigel 592
 Jensen, Ejner Bech 1479
 Jensen, Lars B. 35
 Jespers, Laurent S. 378
 Jindal, Satish 1105
 Johnson, Joseph L. III 140, 559
 Johnson, Scot P. 271
 Johnstone, James A. 1479
 Jones, Ian M. 1079

K
 Karp, Angela 522
 Kauvar, Lawrence M. 965
 Kelly, Robert M. 662
 Kenney, John S. 787
 Kidd, George 16, 110, 211, 322, 433, 541, 642, 732, 937, 1042, 1157
 King, Joseph J. 110
 Kirschner, Michael 1178
 Kleymann, Gerald 155
 Klibanov, Alexander M. 493
 Kochan, Jarema P. 1474
 Kochersperger, Lynn 1215
 Koivunen, Erkki 265
 Kolodin, D. Garrett 170
 Kong, Deyu 583
 Koprowski, Hilary 1484
 Kumar, Nanda P.B.A. 468
 Kurkela, Riitta 1230

L
 Labbé, H. 994
 Lagutin, Oleg V. 592
 Lake, Phil 165
 Lamarche, Nathalie 602
 Lang, Alois B. 683
 Langelier, Yves 602
 Langer, Robert 493, 1205
 Larionov, Oleg A. 592
 Lauwereys, Marc J. 378
 LaVallie, Edward R. 366, 982
 Lazzari, Paul 1185
 Legay, Francois 255
 Leist, Christian 389
 Lereclus, Didier 67
 Levinger, Louis 961
 Levinson, Gene 122, 968
 Liddicoat, Laura H. 1211
 Lilley, Andrew K. 1493
 Lin, Willie 686
 Linck, Nancy J. 962
 Lizardi, Paul M. 161
 Locke, M. 577
 Lodish, Harvey F. 1191
 Long, Cynthia J. 1198
 Long, Marianne T. 674
 Lowe, Keith 677
 Lu, Zhijian 366

Ludwig, Bernd 155
 Lynch, James M. 1488
 Lysakowski, Rich 347

M
 MacLennan, John 1180
 Madden, Mark S. 1479
 Maga, Elizabeth A. 1452
 Malek, Lawrence T. 563
 Maliga, Pal 7, 362, 791
 Maluta, James 449
 Manson, Jean C. 999
 Marchington, Tony 239
 Marshall, Carolynne T. 1072
 Martineau, Belinda 250
 Mason, Hugh S. 486
 Massie, Bernard 602
 Mateu, Mauricio G. 801
 Matoba, Seiji 795
 Matsubara, Fujiohi 1005
 Mauvais, J. 577
 May, Gregory D. 486
 McAda, Phyllis C. 58
 McBride, Kevin E. 362
 McColgan, James M. 982
 McCoy, John 366
 McCoy, John M. 982
 McElroy, David 245
 McGarvey, Peter B. 1484
 McGlynn, J. Casey 638
 McGough, Kevin J. 116, 318
 McGuire, Jeanie L. 410
 McHugh, S.G. 994
 McMaster, J. Russell 1458
 Mellon, Margaret 96
 Melton, David W. 999
 Meri, Paolo 373
 Mertens, Nico 175
 Messens, Joris H. 378
 Messi, Ferruccio 389
 Mhlanga, Musa 765
 Michaels, Frank 1484
 Michel, Hartmut 155
 Miki, B.L. 994
 Miller, Henry I. 955, 1510
 Moffat, Keith 133
 Molin, Sören 35
 Moloney, Maurice M. 72
 Moore, Richard C. 999
 Mori, Hajime 1005
 Mortensen, Richard B. 1215
 Moses, Vivian 652, 1406
 Moyer, Donna L. 1479
 Murray, James D. 1452
 Murray, Kristin S. 366
 Murray, Peter 1105
 Muthukrishnan, S. 686

N
 Nakazawa, Hiroshi 1005
 Nal, Heini 1230
 Nasto, Barbara 1159
 Neesemann, Carroll E. 1065
 Neri, Dario 373
 Newrath, Christiane 142
 Novak, Frantisek J. 486

O
 Oosterhelt, Gottfried 383
 Ogier, Walter C. 449
 Ogonah, Olotu W. 592
 Opsomer, Chris 1085
 Osborne, Mark A. 1474
 Ostermeier, Christian 155
 Oudshoorn, Peter 261

P
 Panis, Bart 481
 Parker, Charles B. 170
 Paul, Jeremy 1431
 Peccoud, Jean 741

Perler, Francine B. 662
 Persidis, Aris 1172
 Petrul, Heike 373
 Piddington, Christopher S. 498
 Pierandrei-Amaldi, Paola 1110
 Pierce, Dottie 677
 Pietsch, Manuel C. 658
 Plooy, Ingrid 507
 Plumptre, Mary 1211
 Poirier, Yves 142
 Porta, Helena 161
 Potrykus, Ingo 686, 1094
 Prausnitz, Mark R. 1205
 Predich, Mima 1435
 Pritchett, Tom 1449

Q

Quay, Steven 319
 Quemada, Hector D. 1458
 Quevedo, Edward L. 44

R

Ramani, Shyama V. 757
 Rambosek, John A. 58
 Ramos, Cayo 35
 Ramos, Juan L. 35
 Rappoport, Sara 798
 Raskin, Ilya 468
 Rathbone, Deborah A. 674
 Rawlings, Douglas E. 773
 Ray, Ronnie A. 445
 Redhead, Nicola J. 999
 Redwood, Heinz 818
 Reeve, John N. 504
 Reeves, Christopher D. 58
 Reini, Stephen J. 53
 Reiser, Jakob 389
 Reiwitich, Sarah G. 1479
 Remault, Erik 175
 Remm, Mado 1211
 Remy, Serge 481
 Ridder, Rüdiger 255
 Riechmann, Lutz 475
 Rissler, Jane 96
 Roberts, Ian N. 1246
 Robinett, R.S. Robin 170
 Romanos, Michael A. 1211
 Ronchel, M. Carmen 35
 Rooney, Barrie C. 592
 Rosenberg, Stanley 1105
 Ross, Margit 677
 Rothenberg, Les 1431
 Royer, John C. 1479
 Ruberti, Francesca 1110
 Rubinfeld, Joseph 934

Ruesch, Otto 542
 Ruoslahti, Erkki 265
 Rusnak, Michael G. 1056
 Russell, Paul F. 1458
 Russell, Stuart M. 1211
 Russo-Marie, Françoise 276

S

Sági, László 481
 Saito, Kyoichi 795
 Salt, David E. 468
 Samson, Maria E. 1221
 Sanders, C. 577
 Sandman, Kathleen 504
 Sanna, Pietro Paolo 1221
 Saul, Allan 1498
 Schaaf, David J. 362
 Schlüter, Kirsten 1094
 Schmidt, Dieter 988
 Schmitz, Rita 255
 Schoofs, Hilde 481
 Schulman, Joseph D. 968
 Schwartz, Brenda L. 1198
 Scott-Ram, N.R. 734
 Seilheimer, Bernd 988
 Selfridge, Jim 999
 Sharp, Nigel A. 1211
 Sheard, A.G. 734
 Sherins, Richard J. 968
 Sherman, Michael I. 127
 Shewry, Peter R. 1185
 Shirai, Nobuaki 1005
 Shuster, Jeffery R. 1479
 Siegel, Jacqueline 13
 Silva, Christopher M. 151
 Silver, Simon 773
 Singer, Maxine 1132
 Sinskey, Anthony J. 1191
 Skerra, Arne 155
 Sliwowski, Mary B. 692
 Smith, Richard D. 1198
 Somerville, Chris 142
 Sonnwald, U. 63
 Sooknandan, Roy 563
 Spence, W. Christine 968
 Spring, Kevin J. 1498
 Stadler, Beda M. 683
 Stahl, Mark L. 366
 Stalker, David M. 362
 Stanssens, Patrick E. 378
 Stayton, Patrick S. 1198
 Steinman, Lawrence 118
 Stemmer, Willem P.C. 549
 Stepan, Anthony M. 58
 Stephanopoulos, Gregory N. 1191

Stoller, Timothy J. 127
 Stone, David G. 9, 208, 536, 940
 Storella, John 546
 Stowers, A.W. 1498
 Strausberg, Susan L. 669
 Strittmatter, Günther 1085
 Stüber, Dietrich 988
 Sugahara, Yusuke 1005
 Sugo, Takanobu 795
 Sumida, Motoyuki 1005
 Summerfelt, Kristin R. 250
 Sun, Cecily R.Y. 779
 Sun, Lee K. 779
 Sun, William N.C. 779
 Sung, Lawrence M. 42
 Sutton, Emma J. 1488
 Svab, Zora 362
 Sveinsdottir, Sinja 763
 Swennen, Rony 481

T

Tafani, Marco 1110
 Tate, Emily 1215
 Tatham, Arthur S. 1185
 Teather, R.M. 974
 Teeter, Geoff 1022
 Thomas, Daniel 439
 Thompson, Ian P. 1493
 Thomson, Bill Jr. 1446
 Thornton, Barry 746
 Timmis, Kenneth N. 35
 Trautmann, Helmut 389
 Tricoli, D.M. 1458
 Trotta, Paul P. 127
 Trueheart, Josh 1431
 Tsuneda, Satoshi 795
 Tucker, Dale O. 1211
 Turpen, Thomas H. 53

U

Uttam, Mahesh 597

V

Van Cleave, Victor 366
 Van Den Brande, Ilse 378
 Van Poelwijk, Frank 261
 Van Rooijen, Gijs J.H. 72
 Vasil, Indra 1165
 Vattay, Anthony 165
 Vetter, Walter 383
 Vihko, Pirkko 1230
 Vijg, Jan 137
 Vilbois, Francis 383
 Villaverde, Antonio 801
 Vinci, Victor A. 58

Viret, Jean-François 683
 Vlak, Just M. 261
 Vlasuk, George P. 378
 Vogel, Monique 683
 Voith, Guido 225
 Vonstein, Veronika 271

W

Wakefield, Andrew J. 445
 Walsh, Gary 1167
 Walt, David R. 597
 Walter, Rick 216
 Wang, Bingcheng 265
 Ward, Mike 21, 212, 213, 311, 425, 535,
 636, 733, 932, 1048, 1428
 Ward, Pauline P. 498
 Ward, R.T. 577
 Weaver, James C. 205
 Webber, J. Mark 271
 Webber, P. 577
 Weber, Patricia 1158
 Wells, James A. 647
 Whips, John M. 1488
 Whitehorn, Erik A. 1215
 Wiebe, Marilyn 1434
 Wiecko, Alicja 486
 Wildman, Howard G. 1246
 Wilke, I. 63
 Willey, David L. 674
 Williams, Kevin P. 1105
 Williamson, R. Anthony 1221
 Winter, Greg 373
 Wipf, Beat 988
 Woodley, John M. 1072
 Wright, Lesley 107
 Wright, Richard M. 165
 Wyatt, Roger D. 498

Y

Yablonsky, Michael D. 656
 Yamao, Masafumi 1005
 Yang, Mary M. 151
 Yanofsky, Stephen Y. 1215
 Yin, John 583
 Yoder, Wendy T. 1479
 Yonker, Cynthia C. 1479
 Yonkovich, Shirlee 1215
 Young, Richard A. 1005
 Youvan, Douglas C. 151

Z

Zang, Michael 389
 Zhou, Xiaodong 498
 Zulauf, Martin 988

Begin 1996 by Meeting this Exciting Group at the Miami Bio/Technology Winter Symposium on

Therapeutic Strategies in Molecular Medicine

February 10-14, 1996 Marina Marriott,
 Fort Lauderdale, Florida, U.S.A.

Speakers:

Stuart A. Aaronson, R. Michael Blaese, Samuel Broder, Joan S. Brugge, Lewis C. Cantley, J. Donald Capra, Anthony Cerami, Philip Cohen, Tse Wen Chang, Stanley F. Crooke, Mario Geysen, Leroy E. Hood, Jeffrey A. Hubbell, Ian M. Kerr, John C. Lee, Robert J. Lefkowitz, Alexander Levitski, Camillo Ricordi, Alan R. Saltiel, Joseph Schlessinger, Stuart L. Schreiber, Joan A. Steitz, Craig B. Thompson, Richard Tsien, Gilbert Vassart, George D. Yancopoulos

Short reports for posters on late-breaking hot papers will be taken up to January 26, 1996.

For information:

MBWS Office Phone: 1-800-MIA-GENE
 (1-800-642-4363) or 1-305-243-3597 or Fax: 1-305-324-5665, E-mail: mbws@mednet.med.miami.edu

